

Reflections on Soil Future(s), Past(s) and Present(s)

Andrew Gryf Paterson

Abstract

Soil, and soil-like substrate such as compost, inspires this essay as a reflection on the art-ecology-heritage poetics that emerged from co-organising a trans-disciplinary workshop. Different temporal-foci are mixed within the text to elaborate upon the potential of soil future(s), past(s), and present(s), in relation to artist-led cultural heritage and innovation. The workshop event was designed and undertaken in collaboration with Latvian interdisciplinary artist Maija Demitere, for the occasion of iWeek International Study Week at Liepaja University in early November 2015. The workshop used a 4-day process to explore with students and other interested persons various temporally-defined practical investigations into soils and our relationships to them. The workshop is contextualized by making reference to other artist-led soil works from art-science, bioremediation or compost-making perspectives. Our workshop activities included making compost in the present; questioning the past histories of soil usage in a contemporary Latvian market-garden; and innovative integrative designs for compost in public-space. Towards the end of the workshop process, our activity split into two foci, in which this author became involved in investigating geophagia—the traditions and practices of ingesting soil—and the making of 'gourmet soil-cakes'. This rather unusual outgoing activity sparked unexpected thoughts and feelings, ranging from relations to tasting and remembering one's displacement from childhood and to the land, as well as digging deeper into social-cultural history to suggest further exploration into suppressed Courland colonial history and dirt-based relationships.

The Ground Rules

Nance Klehm in her *The Ground Rules Manifesto* (2015) invites us towards a “new cosmology of community, economy, and consciousness”, a re-made focus on soil:

Like Marx's proletariat, Soil, along with its partners air and water, is the foundation upon which modern industrial society is built and upon which it is utterly dependent. Soil is our dumping ground and our redemption. Ignored, contaminated, compressed, and dormant, the dirt that waits patiently in vacant lots—and that underlies our urban sidewalks, roads, and buildings—contains the potential not only for its own miraculous biological renewal, but for the regeneration of many of our depleted social, economic, and material structures.. (Klehm, 2015)¹

It is this fundamental *grounding*, pun intended, where increasingly ecological, ecosystem crisis and climate breakdown subjects mix up. It is life-work motivation encouraging artists, cultural workers, practice-based researchers and curators who have worked previously with media and experimental network culture, to learn about—and get involved with—permaculture design, agri- and aqua- culture growing systems and sustainability issues. Furthermore, in addition, many are exploring slower

1 Klehm, N. (2015). *The Ground Rules: A manual to reconnect soil and soul*. Chicago: Social Ecologies (self-published). <http://www.socialecologies.net>

interactions, interdependencies and collaborations between human and non-human actors in networks. For example, consider also the things we cannot readily see, including the microbiota, defined by Joshua Lederburg to signify “the ecological community of commensal, symbiotic, and pathogenic microorganisms that literally share our body space and have been all but ignored as determinants of health and disease.” (Lederburg, 2001). We can expand networks in this newer and wider context to be that which includes plants, these microbiota communities, biotic (living things that make up an ecosystem) and abiotic (non-living factors, such as water, light, radiation, temperature, humidity, atmosphere, soil, stone) systems as collaborators. For example, to offer interdependent lists of example cooperators: local plant communities and supporting pollinating species such as insects, birds and bees; meadows, orchards, forests, woodlands, grasslands; rivers, lakes, and watersheds; the species who populate these sites, as well as human-initiated growing plantations such as allotments and agriculture, urban interventions and guerrilla gardening, foraging, as well as the grassroots communities around these groups.

Having said that, this article is admittedly humanist and subjective in its references, focusing more on human collaborations involved with aspects of creative and cultural production of soil, or related soil-substrata such as compost. As a disclaimer, this author is, or has been, involved in much of the cultural work or organisations that is written about below. Hence, it is written mostly from my own point of view, an attempt at auto-ethnography reflecting upon my own artist-organiser practice,² placing it within its context, nests of collaboration, as well as stretching potential interests into other research or practice disciplines (Jones, Adams & Ellis, 2015). My practical experience is as someone who has got his fingers dirty with allotment gardening for several years for 3 summers with parental and toddler support, and presently, at the time of writing, I have been maintaining a vermi-composting box indoors for the past six months. Note that the worms, small insects, and micro-bacteria have been composting slowly away at their own pace in the background, while I have been writing and composing this text.

Geophagia that we no longer remember

I wish to throw the reader straight into what in my opinion is the intellectually tasty bit, to explore first something less practical and more conceptual: Cultural practices of soil that we no longer remember.

My aim is to open up an emergent research-led branch of practice, and potentially pedagogy, which can

2 This article is written as the last and latest contribution to an article-based Doctor of Arts thesis, tentatively titled 'Auto-archaeologies /of an artist-organiser / (doing fieldwork) in Finland and Latvia', anticipated to be defended in 2017 within the context of Media department, Aalto University School of Arts, Design and Architecture, Helsinki, Finland. Abstract can be accessed: <https://archive.org/details/paterson-2017-agryfp-auto-archaeologies-da-thesis>

be investigated further in the future. One late night research session after midnight in November 2015, I was directed and attracted towards the term 'Geophagia' in a web-search 'cultural heritage soil'. I learned that there was an ancient human relationship to soil and soil-like substrates, such as clay and chalk.. Something which has existed in oral and written literature from all around the world. The subject was one which was so straightforward, and yet also rather complex: Eating soil or dirt. Eating the Land (Callahan, 2003; Starks & Slabach, 2012). In other words, consuming, respectfully, a little bit of the Earth where one is from or nearby.

The most cited cases of geophagia was to remedy a lack of certain trace-minerals, often needed by pregnant women and children, especially in past history, but also in current sub-Saharan African countries, where modern medicinal practices encounter traditional medicinal practices and folklore (Mathee et al., 2014). It appears however that this practice is almost totally eradicated from the 'Global North'. Only toddler-kids and sick people eat dirt says mainstream Western medical and psychological professionals; and kids will grow out of this abnormal craving for non-nutritive items. Associated with the related practice *pica*, eating dirt has been until recently a maligned and misunderstood practice, but is now being addressed by holistic biomedical research (Young, 2011). What is being discovered is that it is something we likely inherited from origin species before *Homo sapiens*, as our genetic cousins in the Apian communities also share the practice of eating clay, chalk and dirt as self-medication. Geophagia "is a widespread behavior in humans and other vertebrates that occurs during both vulnerable life stages and when facing ecological conditions that require protection." (Young, Sherman, Lucks, & Peltó, 2011).

The ingestion of soil is something that we have been conditioned out of doing, either over decades, centuries, or possibly even over 1000s of years. Arguably, just as many have lost the taste for agriculture, or at least direct engagement in the practice of growing plants and food in recent decades, indeed out of touch with the land, directly, so too the majority have totally lost the taste for soil. As medical improvements and understanding of where sources of minerals can be found and how to process them, it is likely other sources were found to replace them. Mary Chamberlain in her book *Old Wives' Tales: The history of remedies, charms and spells* has charted the social history of (mostly Woman's) folk medicine being replaced by mostly Men's scientific knowledge, and so-called modern medicine—as well as by industrial, state-supported or Capitalistic products—over Western developmental history, and in England in particular (Chamberlain, 1981). I suspect eating small tablets of clay to ingest earth minerals has been subjected to the same fate. My own work in collaboration with

Interdisciplinary Art Group SERDE from Aizpute, Latvia, in summer 2010, gathered oral testimony and practical knowledge about how mostly elders were still gathering wild plants, fungi and other natural materials from their local surroundings to self-medicate and treat common or sometimes serious ailments. What we learned that midsummer expedition suggested that in some pockets of Northern European contemporary culture, folk pharmacy traditions prevail (Pucena, Smilgaine & Laizāns, 2010).

One of the most well-documented minerals sampled and eaten from the ground, according to anthropological and biomedical research, is Kaolinite [$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$] also known colloquially as kaolin, china clay, white clay or simply chalk. It is said to suppress hunger (Kamtche, 2010; Chen, 2014). Not surprisingly, contemporary geophagia is most commonly associated with extreme material poverty, lack of resources—where there is a lack of processed minerals available or money to buy dietary supplements—and disaster contexts, such as the infamous mud-cake production to suppress hunger when Haiti was devastated by the 2010 earthquakes, although some reports suggest it has been going on for a long time beforehand (Worldfocus, 2009). There are various opinions and controversy around the topic where eating kaolin is still a relatively common practice in Africa, for example Nigeria or Malawi, where it is reported in media-journalism as being regularly eaten, and according to Afia Agyapomaa Ofosu is “killing [people] softly” (Ofosu, 2012); as well as widely within the specific studies of micro-nutrient malnutrition by geochemical health researchers (Dickinson, Macpherson, Hursthouse & Atkinson, 2009).

Furthermore, there were also reportage on the research of Professor John Strait at Sam Houston State University which notes that descendants of African-American slaves—who moved from plantations to the industrial Northern State cities such as Chicago—carried with them living-memories of consuming small portions of clay, suggesting a research-narrative connecting African-American histories of Deep South, soul food, slavery, poverty, dietary needs and ritual, one which is “expressing an attachment to home, literally and figuratively” (Gauntt, 2010). Indeed in my own travels, I remember in 2007 visiting a Soul Kitchen Café, an African-american heritage food-eatery in South-side Chicago, Summer 2007, and seeing clay-portion as a side-menu item. How popular is it still? What type of person is ordering this side-dish in the impoverished inner-city environment of a North American city, when food-poverty and access to fresh vegetables is an actual acute problem in such neighbourhoods? Additionally, even if this practice was still seen as acceptable or appropriate, where exactly would one find 'clean' soil or

clay to eat nowadays? In the context of displaced and forced rupture of relationships with one's own land, part of the socio-ecological crisis that already exists in many parts of the world, none of these Geophagic ideas should be so surprising to read about. But we shift now to another context and location, folding in the present with future imaginations back to North Eastern Europe, within the Baltic Sea Region.

Soil future(s)

RIXC Centre for New Media Culture (henceforth referred to as RIXC) in Riga have had a vested interest in supporting and engaging with a blend of art, ecology and science within their 'Techno-ecologies' curatorial concept, in collaboration with European network politics theorists and curators Eric Kluitenberg and Armin Medosch (Šmite, Kluitenberg & Šmits, 2013; Šmite, Medosch & Šmits, 2014). This process emerged out of mapping and developing the regional Renewable Network in North East Europe since 2009. I have also held a significant role personally in this process, with various roles as artist, cultural producer, researcher and facilitator, including e-mailing list administration.³ As an artist collective RIXC have also been involved in art+science collaborations, for example 'Biotricity Project: Bacterial Battery' research since 2012- ongoing, and the 'Soil Battery' offshoot 2015, which has been successfully installed in several temporary international locations (Debatty, 2013).

To give another example within similar cultural networks, the pioneering network-culture artists Shu Lea Cheang and Martin Howse presented their live experimental performance 'Composting the City | Composting the Net', using electro-conductivity in soil as aural triggers presented within Transmediale Festival in Berlin, early 2013—and later in Riga in November the same year. The tables on which they were playing live glitch-noise with their laptops, was actually also piled up with soil, compost and rotting vegetables, with small wires plugged in into the middle of the heap. The biological and the digital differentials mingled, as described by Cheang, with the “degenerative process of fermentation and fragmentation of our daily food scraps and shared digital commons.”⁴ Meanwhile, the Finnish Bioart Society, operating in the same region and art+science overlap, and whos 'Hybrid Matters' programme of activities was awarded the prize Nordic Cultural Event of the Year 2015-16, has also treaded confidently into biotic-abiotic, synthetic biology cooperations. Relevant to the scope of this essay within that context is Swedish artistic-researchers Kristina Lindström and Åsa Ståhl's participatory approach to composting styrofoam plastics back into biodegradable matter—and

3 RIXC Centre for New Media Culture. (2009-). Renewable Network. <http://renewable.rixc.lv>

4 Cheang, S. and Howse, M. (2013). Composting the City/Net project. Presented at Transmediale Festival Berlin, 1st February. <https://transmediale.de/content/composting-city-composting-net-resource> | <http://compostingthecity.mobi/>

potentially also a biotic soil ecosystem—using a particular species of grub worm.⁵

Arguably, these are all bright examples of future directions in artist-led innovation in sustainability issues, research and development between different disciplines, especially 'art+science' associational work, cooperation and creative entrepreneurship. To describe it in another way, they have emerged from—and within—the context of post-media research-led practice, and practice-led research. This is what Dominic Quaranta acknowledges as carrying on New Media Art world's destiny in filling gaps between one creative arena and another, between arts and science, arts and technology (Quaranta, 2011).

Soil present(s)

RIXC and Finnish Bioart Society—the reader will not be surprised to learn—are partners within the European cultural association network project 'Changing Weathers' (2015-2016), which focuses around “a set of activities and actions reflecting the status of the changing cultural landscape of Europe, taking into account the shifting geophysical, geopolitical and technological vectors that are shaping it.” and proposing a range of different cultural formats “with a goal of developing, discovering and re-shaping resilient and sustainable cultural practices challenged by climate, economic, ecological, technologic, social, political, cultural, artistic and geopolitical changes and tensions of past-, present and future-Europe.”⁶

Furthermore, in another collaborative network, Scottish Sculpture Workshop and Interdisciplinary Art Group SERDE are associations included within the 'Frontiers in Retreat' project, a 5-year trans-disciplinary artist-residencies programme led by Helsinki International Artist Programme (HIAP), a concurrent EU Culture-funded 'art+ecology' focused process that supports the above-mentioned weave of new and urgent interactions. These two projects, and the persons between them mingle a bit also, myself included as a guest researcher or artist-facilitator in both. This essay is an example outcome of heritage and dirt and creative-innovative explorations mixing up.⁷ From the perspective of artist-led

5 Lindström, K. and Ståhl, Å. (2015). Composting plastics – Öresund. Presented within Hybrid Matters project, 4th and 18th November. <http://invitations.hybridmatters.net/events/composting-plastics-oresund> | <http://www.bioartsociety.fi>

6 'Changing Weathers' project is initiated by the Arctic Perspective Initiative (API) and coordinated by Zavod Projekt Atol (Slovenia) in partnership with Sonic Acts (NL), RIXC network for art, science and cultural innovation (LV), Finnish Bioart Society (FI), Curator Hilde Methi within Dark Ecology Project (NO), Time's Up Laboratory for the construction of experimental situations (AT) and Ljudmila Art And Science Laboratory (SL), and funded by European Union Creative Culture programme 2015-2016. <http://www.changingweathers.net>

7 Frontiers in Retreat is a 5-year international collaboration project (2013-2018) constructed around artist residencies. Operating slowly over an extended period of time to foster artistic and multidisciplinary research, production, discussion and exhibitions around ecology, to consider complex co-dependencies between human and other forms of

investigations and practice in relation to everyday food-culture and participatory culture, an area I have been most interested in within recent years, artist-collectives such as Open Jar Collective based in Glasgow, Scotland, have exemplified with their recent 'Soil City' project how important it is to get to *under the surface* [pun intended] of the urban food topic and engage with the topic of soil, its health and quality for growing food locally and sustainably.⁸ What is appropriate to grow? How do you get good soil or nutrients to do so? As Nance Klehm writes in *The Ground Rules*, this is our foundation upon which everything is based upon, reaching back in time, as far back as you might wish to dig, historically-speaking.

Again back to the Baltic Sea Region, the artist-activist interviews and articles featured within Bonnie Fortune's edited volume *An Edge Effect*, related to art and ecology in the Nordic landscape offer good example to the range of what Anne Sophie Witzke within described as “Hybrid Ecologies” of contemporary art practices in the Nordic region (Fortune, 2014, 41-56). I highlight the work and stories of Marie Markman and Nis Rømer who have worked separately and together on urban gardening and activism projects in central Copenhagen, Denmark; as well as Swedish Åsa Sonjasdotter who cultivated her *Potato Perspective* project to examine the cultural, political and economical implications of growing this plant in the Nordic region (ibid., 2014, 41-56; 118-129; 130-139). Furthermore, the work of Kultivator from Öland, Sweden, focusing on the 'marriage of art and agriculture' is especially pertinent to this article, in which the ceremony event of Summer 2010 included the co-piling of handfuls of soil by each wedding guest onto a wheelbarrow of clay (ibid., 168-182). I know this, not because I read it somewhere in their interview. I was there, and I gave my handful of soil also.⁹ The contemporary post-/media art and network cultural scenes of Northern Europe are to be honest relatively small, and we largely know of each other, more or less directly. We have both tacit and explicit influence on—and between each other—in our hybrid artist-organiser roles, making cultural events, actions and publications that can be communicated wider, further outwards. Every so often influences insert from further away.

One fine example is Brett Bloom, originally from Indiana and Illinois, USA, and based in Copenhagen

life, as well as post-fossil [fuel] subjectivities, societies and aesthetics. Led by project coordinator Helsinki International Artist Programme (HIAP), the project includes partners Interdisciplinary Art Group SERDE (LV), Jutempus (LT), Skaftfell Centre for Visual Art (IS), Mustarinda (FI), Centre d'Art i Natura (CAT), Scottish Sculpture Workshop (SCO), Cultural Front Grad (RS). Further information: <http://www.frontiersinretreat.org>

8 Open Jar Collective (2016). 'Soil City' project. Glasgow, Scotland. <https://soilcity.org.uk>

9 Thomas Gunnar Bagge was commissioned by Kultivator in making a very fine video documentary of the occasion, 'The Wedding Between Art & Agriculture' (2011, full version, 39 min) which can be accessed here: <https://vimeo.com/24644320> | <http://www.kultivator.org>

with his family for a number of years, before returning back across the Atlantic in 2015. He is well-known internationally for his work with Temporary Services collective, and is one of the artists involved in the 'Frontiers in Retreat' project. He writes and publishes with urgency of imagination beyond what he calls “Petro-subjectivity”. Bloom advocates for the contradistinction of practice by deep mapping into our ways of living, to examine and question the way we are rapidly consuming and travelling through our industrialized and globalized landscapes, based on a petroleum-fuelled economy (Bloom, 2015a, 2015b). I paraphrase his thoughts to write that we should do this so that we become aware of our inherited interdependencies, their influences, and discard the inappropriate ones to the present(s) and future(s) still possible. We ideally move to a way of acting critically in the world, with our feet on the ground. We need to loosen—and indeed discard by any means necessary—the failed plans of the past that we are carrying still along, such as petro-subjectivities. We need to learn from past unknowns and other cultures who have maintained a more balanced—and less exploitative—relationship to the land under our feet. We need new ideas for that which we have no idea about in the future, except that try to accept it will be influenced by what Donna Haraway calls the Anthropocene, Capitalocene, and the Chluthocene: human-influenced, Capitalism-affected, and possibly something terrible that we don't yet know (Haraway, 2016).

The Ground Rules Manifesto, excerpted above in the introduction is, in my humble opinion, an inspiring example of activist cooperative entrepreneurship which addresses these complex combination of connections, considerations, time-spans, but also disciplines. It's founder and author Nancy Klehm is a trained landscape designer, permaculturalist, forager, as well as an internationally recognised expert on bioremediation, compost and toilet systems. She also calls herself sometimes an artist.¹⁰ Klehm is by far the leading inspiration behind my involvement in this subject, and I have had the pleasure to benefit from several of her teachings in Chicago and through my invitation, via Pixelache Helsinki, in Tampere, Finland.¹¹

Soil as boundary object

A boundary object helps to mediate differences of understanding in a shared concern. I have assigned and employed boundary object status to something, an artefact, structure or place, in order to assist

10 Nancy Klehm is one of the most recognized artist-horticultural specialists, forager, composter, dry-toilet and bio-remediation experts in the United States, based in Southside Chicago, due to her local and international projects and activism. Last year she self-published the manual *The Ground Rules: A Manual to Connect Soil and Soul* based on her experience of working with soil and composting (Klehm, 2015). Further information about Klehm's work here: www.spontaneousvegetation.net

11 Disclaimer: I had the pleasure to stay at Klehm's apartment in Little Village, Chicago, for 2 weeks in Summer 2007, and

several participatory workshops and research-led practice occasions in the past, for example, a capital city railway-station and transport hub (Paterson, 2004, 2005, 2010). Furthermore, not the first time I have taken a particular species of nature as the trans-disciplinary focus for research-led practice, notably *Empetrum nigrum ssp. hermaphroditum*, aka Mountain Crowberry from the Arctic North (Paterson, 2013).

Soil or compost is itself a complex conglomerate of various matters—a mix of biotic and abiotic—but something which almost everyone who has lived on the earth, over all times, has had a relationship to in some way or another. In reflection it was possible to design a workshop, as elaborated below, whereby soil is the boundary object for engagement, the focus for doing something together in a participatory workshop.

Here I re-visit the practitioners' or researchers' notion of boundary object in this case:

- Soil as “abstraction: it facilitates dialogue between worlds.”
- Soil allowing “multi-tasking: several activities or practices are possible.”
- Soil has “modularity: different parts of the object can serve as a basis for dialogue between actors.”
- Soil as a “standardisation of the information contained in the object: rendering the information interpretable.”

(Wenger, 2000; Trompette & Vinck, 2009)

So far in this essay, I have shared conceptual and production background, as well as motivational context as introduction to you, the reader; a locus for creative practice within inter- and trans-disciplinary network culture, focused towards the making of soil and *soil-like substrata*, such as compost. I have introduced a framework for exploring the cultural heritage of how we engage with soil; as well as given example of experimental, ecological and activist practices related to soil. My contribution to the 'Soil Futures' symposium at Liepaja University on the 2nd November 2016 offered the innovation-orientated post-media students, and the art+science practice-led researchers—or research-led practitioners—who were listening a perspective on cultural heritage as resource.¹² I

was responsible for inviting her to Tampere, Finland in Autumn 2012, for 'Coop Camp: Food-based Cooperation' unconference event, in collaboration with Pispala Contemporary Art Centre 'Hirvitalo', where she made a keynote presentation and compost-improvement workshop. Jodie Baltazar-Kupsc is a film-maker and urban activist, coincidentally also from Illinois USA, but based in Warszawa, Poland. Around 2011-2012, she contacted myself and Pixelache introducing her work there with urban allotment-gardens, making large piles of free compost 'commons' for fellows to take and use. Baltazar-Kupsc was a cooperator in the process of inviting Klehm to Finland and Poland, hence in the end we sent Nance also to Warszawa as part of the same cultural travel, as demonstration of shared value and mutual-aid in composting.

12 RIXC-organised 'Soil Future(s)' Symposium programme info during iWeek 2016, November 2, in the context of

presented an artist-led manifesto in relation to cultural heritage and natureculture, considering the past that we maintain, and fold into the present: We hybrid artists are encouraged into disciplinary-mingling with heritage professionals, learning from each other, and doing so with the hope of taking care of a better future.. One that includes not just human heritage, but non-human and natural heritage also (Paterson, 2015). I argue that it is a subject with much potential as participatory action research (Chevalier & Buckles, 2013), maybe something to conceptually smear into one's skin and dreams.

A workshop called 'Soil Present(s), Past(s), Future(s)

The remainder of this essay introduces newer inter- and trans-disciplinary artist- collaborators also on the topic of soil. I refer to a collaborative, participatory workshop that took place in early November 2015, within the higher-education institution Art Research Lab, Liepaja University, in Courland, Western Latvia. Studies specialize within the inter-disciplinary fields of media arts, as well as encouraging the aforementioned 'techno-ecological' approach led by teaching staff from RIXC in Riga. The lab is also a pedagogical partner within the 'Changing Weathers' project.

I was introduced by Anna Trapenciene, who was then Art Research Lab coordinator, to Latvian interdisciplinary artist Maija Demitere in the middle of October a priori to the workshop. Demitere was then a recent MA graduate of Art Research Lab, and we were given the opportunity by Rasa Šmite of RIXC to design a workshop within the context of the 'Soil Futures' themed contribution to the Changing Weathers project. We developed a workshop programme which focused on activities which were related to the three temporal positions of present (soil samples and composting); past (knowledge about our relationship to soil in the past) and future (new ideas and solutions related to soil and compost). Our initial planning meetings designed a course which focused on different temporal dimensions of knowledge about soil—that what we can know about soil now, what we might have known in the past, and what we can imagine about the future—and spread it over a 4-day period. Maija had much experience she explained in this topic, recently focusing her emerging artistic practice and now doctoral research interests in “deep sustainability, slow media art, developing art research and presentation methods that could offer different lifestyles - promoting individual self-sustainability, using local culture and traditions (Latvian and Soviet cultural heritage) together with technologies to create a deeper understanding of true balance between urban and country environment and individual and communal lifestyle.” Maija's Master thesis focused what she described as “Slow Media Art”

'Changing Weathers' project, Muistas Māja (Customs House), Liepaja. Accessible from <http://www.changingweathers.net/en/episodes/26/soil-future>

(Hamilton & Kwastek, 2014), and her recent works for the 'Virtuozi' exhibition in Riga and Liepaja in 2015 included works “Kurzemes piekrastes arhīvs” (Courland coastal archive), an installation of sand-soil substrates, sea and groundwater in jars mixed with travel stories; “Ūdens dārzs” (Water Garden) an aquaponic installation for alternative food-growing, and “Ēdienu radio” (Food Radio), sonifying food-related data in each meal.¹³ Maija's inter-related subjects of interest reminded me of several hybrid artist-gardeners with soil-passions whom I had the good fortune to meet before, namely Nance Klehm who has already been introduced to you, and Jodi Baltazar-Kupsc from Warszawa.¹⁴

To return to the subject of workshop design, we assumed we might have 8-15 students sign up who would explore respectively foraging for compost-materials and make compost-soil. We anticipated making visual and tactile analysis of the soil clods gathered from different sites. We also arranged to take workshop participants to visit a market-garden salad and fruits grower about 40 minutes from Liepaja to ask her about her knowledge and historical relationship to her growing soil. Lastly, we planned to brainstorm new ideas and issues related to the future use and value of soil. We were allocated a 3rd-level room in Totaldobže's conversion of 'Muitas Māja' (Old Customs House) in Liepaja's old port. This location overlooked—both physically and administratively in the past—the port canal. Across from which on the other side, was the old Baltic-German cemetery among the clusters of trees on the hillside. The workshop, suffice to say, turned out different from our plans,¹⁵ and for me at least, that cemetery became a cipher for something much deeper.

Foraging for participants, carbon and nitrogen contributions

We aimed to take our shovels, dig up clods of the earth, bring them into the workshop space, put our hands in the dirt, and invite others to partake with us. We had small core-group with regular participants Paula Vītola, Anna Priedola, both graduates of Art Research Lab, and additional visiting-contributors Normunds Kozlovs, Ilva Skulte, Kaspars Goba, Albert van der Kooij, who were attending

13 Maija Demitere's work is presented on her online home-pages accessible here at arkaadija.mplab.lv. If you are reading Latvian, there are several paragraphs written by her on her work on the 'Virtuozi' exhibition website at virtuozi.mplab.lv.

14 Jodie Baltazar-Kupsc is a film-maker and urban activist, coincidentally also from Illinois USA, but based in Warszawa, Poland. Around 2011-2012, she contacted myself and Pixelache introducing her work there with urban allotment-gardens, making large piles of free compost 'commons' for fellows to take and use. Baltazar-Kupsc was a co-operator when we brought Nancy Khlem to Tampere, Finland in 2012, as we sent her also to Baltazar-Kupsc's Pixxe project in central Warszawa to demonstrate shared value of specialists and mutual-aid in composting. See: <http://pixxe.org/>

15 Our harmonious-seeming schedule of Present(s), Past(s) and Future(s) activities for groups of students was rudely put out of action due to a lack of advance student sign-ups, and we had to change our strategy. Instead a small core-group of participants was involved, and we 'foraged' for short-term participants among the other more-mediated workshops of iWeek. We were most grateful to those who joined us for a chat, to collect soils or organic materials, or later get involved in intensive making of an aquaponic growing system, or soil-cakes in addition to their other activities.

the accompanying symposium, and felt like joining us for a chat, and to collect soils or forage for organic materials. From the mix of samples, sandy or hummus-rich—as well as dirt of questionable urban quality—dry leaves, twigs and green leaves, provided both 'dry' carbon and 'wet' nitrogen respectively (Martin, 1992). From these mixes we made not only boxes of larger plastic-crate boxes of compost, but also a few samples of bonsai-scaled compost, with parts chopped with scissors and cutting knives, mixed up into appropriate layers. This part of the participatory workshop process was much more ad-hoc than planned, but created the demonstrable effect: A group of persons looking around impressed at boxes of newly constructed compost boxes. These boxes were left on the table for the whole week, and formed one display table at the exhibited demonstrations of process and production at the end of the workshop week.

Supermarket garden expedition

However, our field-trip to the supermarket garden producer raised curious questions about soil past and bio-dynamism on-site. The Second Latvian Independence -era which followed the collapse of the Soviet *Sohvkoz* collective-agriculture system 20 years ago is a new relationship to the land in many ways. With the fall of a decrepit and largely-disliked Communist State-planned system gone, so with it was a whole organisational-culture scraped off and thrown away, not just the socio-economic agricultural agreements and social-work protocols, but also the knowledge of the soil and the land (Karklins, 2005). New practices of measurement emerged gradually under difficult economical circumstances, and with joining the EU, a whole new regulation environment, experienced by the small-scale farmer in arguably no less top-down than previous regimes.¹⁶ Following our market-garden visit, we made some little sand-dune tourism, and reflected in our various ways on what to do next. With a need to focus towards exhibit-able outgoings in a way different from the pre-workshop plan, we intuitively split into two workshop group investigations. The following paragraphs elaborate upon what was done, and anticipates the further conceptual and practical developments of the 'Soil Futures' concept.

Aquaponics and soil-system scenarios

As a complement to the boxes of compost materials, Maija Demitere led the plan to collaboratively install an aquaponic growing vertical growing system in the workshop space, mirroring an installation she used in her family-home. Aqua- and Hydroponics are currently used frequently as an alternative to soil-growing, especially when root-based products are not the focus of the food-plant. The group of

Demitere, Paula Vītola, and Anna Priedola was joined by Martins Mamish in constructing the water-based growing system. Swiftly the equipment was gathered and sourced from the local hardware store, fish transported, plastic-tubes and bottles gathered, then wire-frame screwed and tensed into place. Hence, an aquaponic system was built over the two remaining days to complement the dirt. The outgoing exhibit of process: A quick-'n'-dirty-less illustration of the potential of an almost-closed-loop nutrient system: The fish are fed, their excrement contains the nutrients, which is deposited in the bath of water, which is pumped around the framework of cut-bottle pots, through the roots of plants. Left in good conditions of temperature and with ample light, the seedlings or pre-grown plants would have grown salads, and other leaf-based plants in decent time.¹⁷

In addition, following the meeting with the market-garden farmer, compost as a soil fertility material became—according to Anna Priedola—the main 'Soil Future(s)' topic to explore that her, Maija Demitere, and Paula Vītola wished to elaborate upon, was motivated by the words of the farmer which struck them deeply: that the quality of soil does not matter today because the [synthetic] fertilizers allow one to grow almost the same amount of crop in the poorly, sandy soil of sea-side in Courland (Kurzeme in Latvian), than in the rich soils of inland Zemgale. As a result of their brainstorming, the group produced excellent diagrammatic illustrations of future soil-system scenarios and designs, which elaborated the closed-loop aspects of the aquaponic example. Compost-heated urban furniture and greenhouses, collaboratively imagined by the trio, and drawn out on large brown-paper sheets, schematically planning out various potential soil futures, which with smart design and maintenance, could re-imagine pro- bio-dynamism not just for plant and root growth. For Anna (Priedola), she remembers her favourite proposition to be the Urban Compost-heated Shelter for people in need, where also some food can be grown. Hence in all, a range of promotions of innovative traditions and no-effort growing were spread around the workshop room for exhibit and display.

Making gourmet soil-cakes

Other than the workshop co-design, my main content contribution to the 'Soil Present(s), Past(s), Future(s)' workshop, turned out to be the forgotten intangible and tangible cultural heritage of soil. The background 'night-time' research on Geophagia—outlined at the beginning of this article—led to experimental making of soil-cakes. Linda Strauta, then BA media art student of Art Research Lab at Liepaja University, joined me in intensive 1-day collaboration. I had wished for a least another who

¹⁷ For further information about aquaculture and soilless farming, I recommend the United States Department of Agriculture's Alternative Farming Systems Information Center's web-portal on Aquaponics. *National Agricultural Library*. Accessible from <http://afsic.nal.usda.gov/aquaculture-and-soilless-farming/aquaponics>

was willing to get their hands dirty on topic, and fortunately I found in her a kindred spirit for this curiosity. So we set about make soil-cakes, mixing up the foraged soil and sands, plant and seaweed organic matters, with the things you might normally find on your kitchen shelves, cupboards, and fridge. The 'wrongness' of soil on the table with food-products which one eats was palatable, and very curious root emotion: Where did we learn this feeling from? As toddlers and kids, perhaps, scolded by our mums and dads. What emerged from the process, as improvised outgoing products, was what I called 'Gourmet.Geophagia.lv', a mix of local and trans-local ingredients to make seductive-looking soil-cakes.

In the process I recalled my experiences working in a professional kitchen in mid-to-late-1990s Merchant City, Glasgow: Café Gandolfi was where I learned the 'zen' of salad-making and cold-food preparation. I like to think I know how to make something look well presented to eat. We created together over around a dozen different samples of 'ingredients', dark-bLOTS in any menu. I did not imagine that I was making something for the viewer or audience to actually eat or taste—in fact I wouldn't encourage that at all, as I knew exactly where the soil came from, and it wasn't good—I was interested in creating the desire to taste them. For the viewer and curious one to say, “Mmm, it looks good enough to eat!”.. But imagining ourselves as 'undisciplined' scientists or cooks, we left all our ingredients and items spilled over the table, refusing to clean up. Beautiful arrangements in serving dishes, was contrasted nearby, with our process and 'uncomfortable' combinations laid out on table for all to see, and feel a little disgust too.

Soil past(s)

After the workshop, I reflect and write now about how we—as hybrid artists—can engage appropriately with *soil past(s)*. Artists, artisans and activists have always been involved in longer-time commitments with sites, species and socialites which are fostering and encouraging increasing adoption and re-learning and maintaining of fermenting and compositing practices (Martin, 1992), among other intangible and natural cultural heritage traditions.

I write this with confidence after the privilege of collaborating with Signe Pucena and Uģis Pucens of The Interdisciplinary Art Group SERDE for many years, who in my opinion are one of the leading examples in Europe and internationally for fostering a fertile mix of contemporary inter-disciplinary art practice and cultural heritage. SERDE have undertaken as artist-cultural workers many UNESCO Latvia fieldwork expeditions to gather oral testimonies from different cultural groups, traditional

practices and regional stories. This small-scale association with big ambition were recently recognized with NGO advisor status to UNESCO, the only such representative from the Baltic States of North East Europe.¹⁸ Their approach is complementary, I propose, with the curatorial lead of Nuno Sacramento, Director of Scottish Sculpture Workshop (SSW henceforth) between 2008-2016 at Lumsden, Aberdeenshire, Scotland.¹⁹ SSW's residential artist workshop location has a long history of working with biotic and abiotic materials of an from the nearby rural Aberdeenshire landscape, and the relationships developed between artist, artisan, research and the soil or land. The Camp Breakdown break down event at that location in July 2015, for almost 2 weeks, brought together many speakers and examples of this approach among the practitioners gathered, focusing on critical insights into soil, land-ownership rights, and meaningful spiritual, cultural and plant-based relationships with the land.²⁰

Nuno Sacramento, in collaboration with Brett Bloom, has promoted at SSW a 'Deep Mapping' approach to land and material relations with landscape, introduced to this author at the Camp Breakdown breakdown gathering at SSW. According to Bloom, “[m]aking a Deep Map is a way to be conscious of a place in-such a manner as to hold multiple layers of understanding of the present moment in a non-reductive and robust manner.” He references William Least Heat Moon's *PrairyErth: a deep map* (1999), in which the author Least Heat Moon devotes years visiting and writing about one particular county, that is Chase County in Kansas, getting to know 744 square miles and meeting 3000 residents, while learning deeply about its landscape, history and people, more than fleetingly, arguably, intimately. They each recall Clifford Geertz's 'thick description' method from *The Interpretation of Cultures* (1973), which proposes giving dense contextual meaning to a cultural and ethnographic description. Archaeologically-minded performance art, and those related archaeologists exploring the theatre/archaeology overlap have also elaborated on this term (Shanks & Pearson, 2001; Holtorf/Piccini, 2009). I quote Mike Pearson, who describes his volume *In Comes I* (Pearson, 2006) as a “guidebook for a journey through a landscape imagined, the texts simulating and catalysing memories and reminiscences of similar times, similar places, similar experiences—and of other times, other places, other experiences—in acts of biographical wandering.” Pearson describes Deep Maps as:

“attempts to record and represent the grain and patina of a location—juxtapositions and interpretations of the historical and the contemporary, the political and poetic, the factual and the fictional, the discursive and the sensual; the conflation of oral testimony, anthology, memoir,

18 The Interdisciplinary Artist Group SERDE (2002-). Aizpute, Kurzeme, Latvia. <http://www.serde.lv>

19 Scottish Sculpture Workshop (1979-). Lumsden, Aberdeenshire, Scotland. <http://www.ssw.org.uk>

20 Sacramento, N., Bloom, B. and Billimore, Y. (2015). Camp Breakdown breakdown, Scottish Sculpture Workshop, Lumsden, Aberdeenshire, Scotland. <http://www.breakdownbreakdown.net/>

biography, natural history and everything you might ever want to say about a place.”
(Pearson, 2006: 15)

These are references that I very much sympathize with also in my own investigations with human relationships over longer time to harder, stone matter.²¹ The 'Deep Mapping' approach of Bloom and Sacramento emphasises the critical environmentalist art and activist angle, as well as recognition of the accumulative layers of narratives, agencies and actions at a particular site over time. This quality I reflect and argue is increasingly significant—and growing necessity—in our complex and complicating topic: that is cultural practices related to the topic of soil, one of the biotic foundations of life along with that of water, which nourishes us in health and sustenance.

Soil is now whole-heartedly spread out on the hand in front of me, under my nails, worn into the creases in my hands, filling my mind with hopeful thought. The philosophical and political science contribution of Ernst Bloch's writings in the 1930s invites us into consideration especially of the continual fold of the past in the present, what he names as *non-contemporaneity*. This blend has its dark sides which he acknowledges in *Heritage of Our Times*, especially in regards to the promotion of 'our soil' and wellbeing by the then National-Socialist/Nazi German State when he was writing this volume in the 1930s Germany. However, on the flip-side, recognising the role often the *past-in-the-present* holds great utopian potential for change also: “The revolutionary knotted line, in which contradiction finally tangles up at a single point and rapidly presses for the revolutionary unravelling, can accordingly occur only in contemporaneous contradictions which are themselves the growing child Future or differentness, not in non-contemporaneous ones whose greatness is long past..” (Bloch, 1991, 110). Vincent Geoghegan has reflected more recently upon the influence of Bloch, carrying on his spirit in his article *Remembering the Future*, where he reminds us that that act of remembering is far from innocent activity: “What we desire will play a role in the act of memorizing”, and in the case of remembering, “hopes and anticipations will play an important role in the invention, distortion, selection, and framing of memory. What is most desired is missing in the often uncontrollable present but can be present in a controllable, if, in varying degrees, mythic past. Harmony, warmth, and belonging can live in the supposed golden days of long ago.” (Geoghegan, 1997, 17). I continue by paraphrasing Geoghegan—who wrote the following in first-person—by converting his words into third-person as a collective voice in my imagination: Our past memories will have a constitutive role in

21 Paterson, A. G. (2007-2011). Clackmannan stone-(person). Clackmannan, Clackmannanshire, Scotland.
<http://archive.org/details/clackmannan-stone-person>

the forging of my present and future perceptions. Since we are not a blank sheet or piece of blotting paper, but rather a dynamic, constructive perceiver, we enter the future with a body of assumptions and preoccupations located in memory. The infinite range of possible futures is winnowed down to my possible futures through this interactive process. In this we can be said to be “remembering the future.” (ibid., 17-18).

I summarize in arguing that heritage as a discipline of practice and research focuses our attention on the care and concern for the material and immaterial things that humans share in our environment, and as well as the passing on of living traditions. It is sensitive to the sustainability of cultures and practices of value over longer durations of time. Conservation and stewardship provide ethics of responsible planning and management of resources, accepting or assigning responsibility to shepherd and safeguard the valuables of others. There is much scope for inter-, trans-disciplinary practice, research and development that crosses over many boundaries to focus on the task of engagement, renewal and regeneration at hand and at feet: In this case, soil.

Conclusion

The combination aspects of Soil Present(s), Soil Past(s) and Soil Future(s) workshop raised many intermingled thoughts and practices, which can be localized, but also connect to much larger systems related to the management—and care—of soil ecosystem, both the biotic (living things such as bacteria colonies, insects and other 'bugs', seeds, worms, etc.) and abiotic (non-living factors, e.g. stone, mineral, other substrates, as well as water, radiation, temperature, humidity), all aspects which make up soil. And there are also things you might not expect to be there naturally. Things that humans are responsible for, including its quality or its degradation; its health or its pollution. One thing for sure, is that everything which is in the soil—part of the Earth that is under our feet—has always been there, in some atomic arrangement or other, since the beginning of material time. This eternal materiality is the context and locus for all that we put in it, as well as what we might in past, present or future, ingest into ourselves.

An archaeological, conceptual, practical excavation (or production even) of land and soils should focus then, not just on the artefacts held within, but the surrounding contextual container—the locus, as it is referred to by archaeologists—which is also describing the characteristic and quality of the soil itself. This holds true also to understanding that in different places, different His- and Her-stories are going to adjust meanings of what is valuable in life, hunger, desire and death. Arguably an appropriate summary

of our ambitions, the range of topics that could be explored within our workshop.

Rumour has it that across the canal from where we made our workshop, at the old Baltic-German cemetery, when construction workers dug away part of the hill—and so part of the cemetery as a result—to build the energy power-station next door, they found African jewellery. Most likely from the days when it was the port of the Duchy of Courland and Semigallia (*Ducatus Curlandiæ et Semigalliæ*, *Herzogtum Kurland und Semgallen*), in the later era of the Polish-Lithuanian Commonwealth. The Baltic-German Duke Jakob Kettler had held briefly a short-lived colony with fort named after him between 1651-1660 which was previously known as St. James Island, named, after the Portuguese, by the British Imperial colonialists. Now a UNESCO Heritage site, the island is known since 2011 as Kunta Kinteh Island. No mention of Courland or Latvia is in the official heritage site description, mapping out its historical precedents. Kunta Kinteh was the famously-narrated African-american slave who inspired many 'Roots' stories of cruel displacement, racism and forced labour, whose name re-branded St. James Island in The Gambia. What is there to be proud about on this land? What are you proud of on your land? These questions seem like a suitably complex ending to this essay. It may help explain why a part of something from African territory—bone or minerals—were mixed up in the rich hummus soils of what is now Latvian Courland. Just as we live in a mixture of non-contemporaneous present(s), past(s), and future(s), so do the things we and others make. Q: Are there any #*Dainas* (Latvian folk songs) about #*Mēslojums* (useful shit;) or compost? A: There should be.

Documentations:

Selected media documentation & related texts—including this one—can be accessed here:

<https://archive.org/details/soil-presents-pasts-futures>

Author biography:

Andrew Gryf Paterson is a Scottish 'artist-organiser', cultural producer, educator and independent researcher, based since late 2002 in Helsinki, Finland. He specialises in developing and leading inter- and trans- disciplinary projects exploring connections between art, digital culture and science, cultural activism, ecological and sustainability movements, cultural heritage and collaborative networks. What is left behind as social, digital, material and ephemeral residue of 'being t/here' has been a consistent concern. He has been closely connected to Pixelache Helsinki for 12 years, and completing his Doctoral of Arts thesis at Media dept. of Aalto University ARTS. More or less archived here:

<http://archive.org/details/@agryfp>

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